



Conserving Land for People

The Trust for Public Land

Using land conservation strategies for protecting drinking water sources



Land Conservation and Water Quality

According to AWWA,

“The most effective way to ensure the long-term protection of water supplies is through land ownership by the water supplier and its public jurisdictions.” (AWWA Journal, 1995)

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How did TPL move to water quality issues? Clearly there is increasing interest in land use as local water managers address nonpoint source pollution issues. Regulation and best practices are part of the solution, but according to AWWA,



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Water Supplier Efforts

- Over 1/3 of water systems have some type of source protection program.
- 9% of utilities own or control *more than* 95% of their watershed.
- 80% of utilities own or control *less than* 5% of their watershed.

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So what are suppliers doing? Here's what we know.

While 9% control their watersheds, 80% don't.

Note that 9% of the utilities that control a majority of their watersheds doesn't necessarily mean they own those lands. Only 3% own more than 95% of their watershed.



Challenges to Increasing Protection

- Policy-makers view increased treatment as best and only option.
- Federal and state programs fail to provide adequate funding or guidance.
- Water suppliers lack technical support or resources to implement land conservation strategies.

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What's holding the 80% back?

Most education, dollars and technical assistance are geared toward treatment advancement

Suppliers don't know who to go to. No natural links to land conservation partners or programs.



TPL's Source Protection Program

- Policy research and advocacy
- Technical assistance for water suppliers
 - *Greenprinting – targeting sites for acquisition.*
 - *Local support in raising public dollars and doing deals.*

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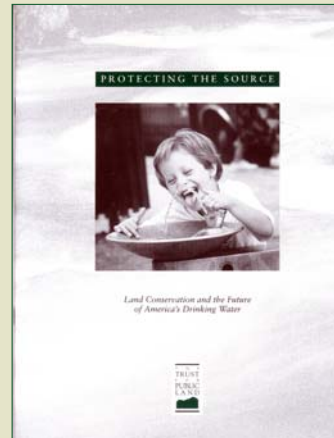
So what are we doing?

(if time permits, talk a little about advocacy – esp state and local efforts)



Policy Report

- Scientific link between land use and water quality.
- Public health risks of unprotected source.
- Cost/benefit analysis of source protection strategies.



This report will address key issues shared with us by suppliers and regulators that are seen as challenges to using land conservation as a tool.



Greenprinting Case Studies: EPA Source Water Project



Trust for Public Land
USDA Forest Service
University of Mass
Funded by EPA



EPA Source Water Project Goals



- Identify areas where conservation and forest management will provide greatest benefit to drinking water
- Develop implementable strategies
- Catalyze local efforts to fund and implement strategies



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Three Phases

Phase I Data collection and analysis

Technical and Watershed analysis

Phase II Stewardship Exchange

Analysis to implementation

Phase III Implementation

Funding and implementing priorities



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Watershed Selections

- *Nashua River* on the border of NH and MA
- *Little Tallapoosa River*, just west of Atlanta
- *Pretty Boy Reservoir* system, just NW of Baltimore
- *Metedeconk River*, in central NJ near the coast





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Greenprinting for Water Protection

- Watershed-wide planning, across local and state boundaries
- Technically sophisticated visioning to prioritize land protection goals
- Financial analysis and potential finance measures
- Focused implementation strategies





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Today's Case Studies

Steve Jones, Suffolk County, Water Authority, NY

Chris Rowe, Cherry Creek Stewardship Partners, CO

Steve Sprecht, Brick Township Municipal Utility Authority, NJ



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Suffolk County

The New York Clean Water State Revolving Fund has loaned Suffolk County \$75 million for land acquisition to protect the main recharge zone for Suffolk County's drinking water supply – a sole source aquifer for 2.6 million people. In the 1980s, concern about drinking water led to the creation of the Suffolk Co. Drinking Water Protection Program. Funded with one-quarter cent sales tax the program acquires land in the aquifer recharge area. In addition, five municipal jurisdictions in the county also have land acquisition programs to protect land in the recharge area.



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Cherry Creek

The Cherry Creek Smart Growth for Clean Water Partnership is establishing a continuous natural greenway and watershed enhancements such as wetlands creation to protect the water quality of the Cherry Creek Reservoir and specifically to reduce phosphate loads. Their efforts range from land acquisition to partnerships with developers and public agencies in the Cherry Creek Basin, one of the fastest growing regions of the nation.



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Brick Township

The Metedeconk River watershed is located in east central New Jersey and provides drinking water to about 100,000 people in Ocean County, NJ. The river receives most of its flow from an unconfined aquifer system. Though water quality is currently good, the booming growth rate and high-density zoning are leading the utility and the township to begin using land conservation and forest management particularly in the undeveloped headwaters of the river where they're partnering with the state on land conservation.